TWO NEW SPECIES OF HEZA FROM CUBA (HEMIPTERA-REDUVIIDAE).

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Since the last contribution¹ on the Cuban Reduviidae was published two additional species of the genus *Heza* have come to hand, neither of which appears to have been described. The number of known species from this Island is thus increased to four, the largest number yet reported from anywhere in the West Indies. Champion records only three species from Central America, the bulk of the known forms being South American.

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Heza angustata n. sp.

A rather slender bright reddish testaceous species with a very small blunt spine on the outer apical angles of abdominal segments I to 3 and the anterior lobe of the pronotum unarmed.

Male.—Form moderately elongate and slender. Head about three-fourths as long as pronotum, the anterior and posterior lokes subequal in length, the latter seen from above gradually narrowed behind to slightly more than one-half greatest width in front; ocelli large, well elevated; the two post antennal spines suberect, rather short, about one-half as long as vertical diameter of eyes; eyes very large; juga conically elevated at apex; rostrum with segment I about as long as segments 2 and 3 combined. Antennae long, linear, segment I longest and reaching behind apex of scutellum, shorter than 2 and 3 combined, segment 2 shorter than 3 which is more than twice as long as 4, the latter extending for about full length behind apex of abdomen; segment I bare, others with very short rather thin pile. Pronotum slightly longer than wide; anterior lobe unarmed, glossy, about two-thirds the length of posterior lobe, sculptured, anterior lateral angles rounded, a longitudinal dorsal sulcus, this more prominent behind and on each side of which is a rounded elevation; posterior lobe rather coarsely and densely punctate, the four dorsal spines long, stout, of equal length,

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posterior margin before scutellum very shallowly concave. Scutellum with median depression behind base and a sulcus on sides from base to behind center, apex bluntly pointed. Hemelytra slightly surpassing apex of abdomen. Abdomen narrow, connexivum not exposed; segments 1 to 3 armed on outer apical angles with a minute blunt spine, this stronger on segment I; apical angles of segment 6 with a small toothlike prominence. Beneath minutely and thinly pubescent. Legs normal, anterior femora somewhat incrassate, these as well as anterior tibiae and trochanters covered below with dense growth of fine stiff erect hair, about one-third as long as diameter of femora; legs elsewhere with scattered longer fine pale hairs, the apical half of tibiae pilose. Prosternum rounded in front. Tubercle on mesopleura small but distinct. Hypopygium longer than broad, apical margin produced into slender process curving upwards; claspers long, slender, curving upwards and projecting slightly behind apex of abdomen (Fig. 3), clothed with thin vellowish hairs.

Color bright reddish testaceous, paler below; portion of sixth abdominal and genital segments fusco piceous; veins of membrane largely infuscated; intermediate and posterior femora fading to greenish yellow towards base; apical half

of scutellum and veins of corium pale.

Length 14.5-15 mm., width at shoulders 2.75 mm.

Type: Male, Las Animas, Sierra Rangel, Pinar del Río Province, elevation, 1500 feet, August, 1930; Hermano Roberto, Colegio "La Salle," collector; deposited in the U. S. National Museum, No. 43568. Paratype: Male, from the same locality, April 3, 1931; A. Otero and J. Acuña, collectors (reared from nymph); in collection of H. G. Barber.

This insect does not appear to be very similar to any of the described species of the genus. In general facies it resembles the male of Heza similis Stål but differs particularly in having the anterior lobe of the pronotum unarmed posteriorly, in the presence of the small blunt spine on abdominal segments 2 and 3 and in the distinct coloration.

Heza havanensis n. sp.

A moderately large pubescent fuscous and testaceous species having segments I and 2 of the antennae annulate, the first five segments of the abdomen armed with a distinct spine on the outer apical angles, the fifth and sixth strongly produced and dilated, and the anterior lobe of pronotum provided behind on disc with two minute tooth-like tubercles, scarcely differentiated. This species also has strongly elevated spiracles, prominent juga, and the basal segment of the rostrum slightly longer than the second and third combined.

Male.—Form rather narrow with sides subparallel except towards dilated apex of abdomen. Head about three-fourths length of pronotum, the anterior and posterior lobes subequal in length, the latter seen from above with sides subparallel, only slightly narrowed posteriorly; the juga prominent at apex as rounded elevations; ocelli large; the two post antennal spines very erect, slightly curved, somewhat shorter than vertical diameter of head. Eyes of moderate size. Rostrum with segment I slightly longer than segments 2 and 3 combined. Antennae with segment I reaching to apex of scutellum, clothed with few scattered erect hairs (other segments missing). Pronotum about as broad as long, the anterior lobes with lateral angles armed with a prominent obtuse conical tubercle, the disc provided posteriorly with two minute, scarcely distinguishable tubercles on rounded elevations, surface considerably sculptured but otherwise smooth except for scattered patches of ashy pubescence; posterior lobe closely punctate with scattered patches of ashy pubescence, the four dorsal spines long, stout, very sharp and of approximately the same length, posterior margin before scutellum shallowly concave. Scutellum with deep median impression in front, then elevated, depressed strongly at apex and sides, pubescent; apex rather sharply pointed. Hemelytra attaining apex of abdomen; quadrangular areole relatively broad; corium finely pubescent. Abdomen with connexivum not exposed except towards apex where the fifth segment is considerably dilated; the apical angles acutely produced and directed backwards, the apical angles of the sixth segment also dilated and produced into an acute point projecting on either side slightly beyond hemelytra; segments I to 5 armed with well developed sharp spine on outer apical angles; spiracles large, strongly elevated, visible from above (in dried specimen) on segments 2 to 4. Beneath rather evenly clothed with ashy, appressed, rather coarse pubescence. Legs relatively short and stout; anterior and intermediate femora slightly incrassate, surface somewhat uneven: legs thinly clothed with long thin dark hairs, more abundant on tibiae which are also pilose towards apex. Prosternum somewhat angularly prominent in front. Plica on sides of

mesosternum distinct, well elevated. External genitalia of usual form, the claspers very short (Fig. 4).

Color light dull brownish fuscous varied with testaceous. Head fuscous; antennae with basal segment fuscous broadly annulated with three flavescent bands (the remaining segments missing); most antennal spines paler at apex; rostrum with segment I and part of 2 testaceous. fuscous, the elevated areas fading to testaceous, apical half of posterior dorsal spines of pronotum flavescent. Legs flavescent and fuscous brown; the femora marked with uneven longitudinal fuscous streaks and lines, these confluent in front, the posterior femora with indefinite bands; the (anterior? and) intermediate tibiae largely fuscous with irregular longitudinal flavescent markings on posterior side; the posterior tibiae largely fuscous, the base and incomplete ring on basal third testaceous; tarsi fuscous. Hemelytra largely flavotestaceous, the membrane pale brownish, irregularly spotted with fuscous, markings confluent along vein from costal areole, forming conspicuous dark vitta to apex. Abdomen below dull greyish fuscous.

Female.—Much larger and more robust than male. The antennae are relatively shorter, the first segment barely attaining hind margin of prothorax; segment 2 with one broad flavescent band, clothed with rather short hairs; segment 3 (and 4?) entirely flavescent, clothed with fine pale pubescence. The head appears slightly broader posteriorly as seen from above and the eyes much smaller than in the male, only about one-half greatest depth of head. The two very small tubercules on the disc of the anterior lobe of pronotum. which are nearly obsolete in the male, are somewhat more The quandrangular areole of the hemelytra is broader, less than twice as long as broad. The connexivum is narrowly exposed, much more so posteriorly, the segments dull fuscous in color, with an indefinite macula through the center of each and apex of spines testaceous; the spines on the apical angles are stouter, and the fifth and sixth segments are much more stronger dilated behind, rounded and more The legs are paler, the dark longitudinal streaks more definite, and there are no distinct annulations.

Length, male, 13 mm., width at shoulders 2.5 mm.; female, 18 mm., width at shoulders 4 mm.

Type: female, Almendares River, Havana, Cuba, August 6, 1930, C. G. Aguayo, collector. Paratype: male, "Cuba," P. R. Uhler collection. Type, No. 43569, and paratype in the U. S. National Museum.

The male which I have made a paratype was evidently sent to Uhler by the late Dr. J. Gundlach as it bears the number 259 which in the list in the manuscript notebook of Gundlach, now preserved at the National University in Havana, corresponds to "Heza acantharis Lin.," a name also placed on this specimen by Uhler. How this mistake occurred is not easily understood as the true acantharis is very different as will be seen later. Gundlach also had specimens of acantharis, presumably determined by Uhler (as were most of his Hemiptera) but these are placed under another number (118). Gundlach's number 259 (havanensis) is recorded as taken at Cárdenas (Matanzas Province) and Rangel (Pinar del Rio Province). Thus the known distribution of this species is the western half of Cuba.

From the short description given by Stål this species would appear at first sight to be rather closely related to pulchripes of Porto Rico. I am indebted to Mr. H. G. Barber for the opportunity of examining an Heza from the Island determined by him as pulchripes of Stål. Except for the absence of annulations on legs and antennae this specimen, which is a female, agrees with the original description. When directly compared with havanensis it is seen to be strikingly different. In the Porto Rican species there is a very small spine on the first abdominal segment, an almost obsolete, minute, very obtuse tubercule on segments two and three and a more distinct but small obtuse tooth-like tubercle on the remaining segments. Stål in describing pulchripes states "segmenta 1 (et 2?) abdominis extus apice spinula armata." This definitely excludes havanensis which has sharp, well developed spines on the first five segments in both sexes, and the remaining segment with the apical angles strongly produced, and in the male spine-like. As in the present species, pulchripes has the abdomen broadest at the apical angle of the fifth segment, which is considerably dilated, but unlike havanensis the sides of this segment are not rounded and the apex is not directed backward but outward. The female is also more slender with longer legs and antennae. The disc of the anterior lobe of prothorax of pulchripes is armed with two short but distinct spines posteriorly which are barely distinguishable in havanensis and the body is covered with much more conspicuous pale pubescence, this forming a white patch on the apex of scutellum; furthermore the basal segment of the powerful rostrum of *havanensis* is slightly longer than segments two and three combined while on *pulchripes* it is slightly shorter.

The various species of the genus *Heza* as recognized at present show great diversity in structure, and it is not a very homogeneous group. The four species now known to occur in Cuba

may be readily separated by the following key:

KEY TO THE CUBAN SPECIES OF HEZA.

- - First three abdominal segments only armed with spine on outer apical angles, spines very weak, stronger on basal segment; apical angles of sixth segment with small tooth-like prominence; post antennal spines in male short, much shorter than diameter of eyes, joint 1 of rostrum about as long as 2 and 3 together; slender, nearly bare species (L., male, 15 mm.) angustata n. sp.
- 2. First five abdominal segments armed with strong sharp spine on outer apical angles; apex of abdomen rounded joint I of rostrum distinctly shorter than joints 2 and 3 together; body finely clothed with very minute silky pubescence; moderately large and stout species of normal form (L., I4–I7 mm.)

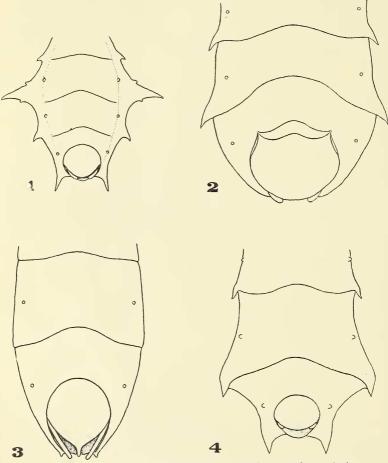
 acantharis Lin.

Six abdominal segments armed with spine, or outer apical angles produced as more or less acute flattened point.....3

- - Abdomen broadest at fifth segment where apical angles are dilated (more so in female) and produced into point directed backwards; anterior lateral angles of pronotum with large conical tubercle, disc of anterior lobe armed behind with two minute teeth or tubercles (at least in female); joint I of rostrum slightly longer than joints 2 and 3 to-

gether; juga elevated; larger ashy pubescent species with two basal segments of antennae annulated and abdominal spiracles strongly elevated (L., 13–18 mm.)

havanensis n. sp.



Cuban species of Heza: apical half of abdomen from below. H. clavata Guérin. 2. H. acantharis Lin. 3. H. angustata n. sp. 4. H. havanensis n. sp. The hairs are not represented.